Cable Mesh Drapery System

State Route 199 in Del Norte County
01-DN-199-18.3/18.6
EA 48270

Focused Initial Study with Negative Declaration

Prepared by the
State of California Department of Transportation

January 2010

General Information About This Document

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01-199-R18.3/R18.6
EA 48270

FOCUSED INITIAL STUDY
with Proposed Negative Declaration

Submitted Pursuant to: (State) Division 13, California Resources Code
(Federal) 42 USC 4332(2)(C).

THE STATE OF CALIFORNIA
Department of Transportation

Oct. 29, 2009
Date of Approval

Cindy Anderson, Office Chief - North
North Region Environmental Services
California Department of Transportation

State of California
Department of Transportation

SCH Number: 2009112004
01-DN-199-R18.3/R18.6
EA 48270

Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation proposes a project to increase safety and roadway reliability on a segment of State Route (SR) 199 in Del Norte County from postmile R18.3 to R18.6. A cable mesh drapery system will be installed on the face of a cut slope to reduce the amount of rock debris that reaches the travel lanes. The cut slope is adjacent to SR 199, and within an existing Department of Transportation easement in Six Rivers National Forest.

The area to be covered is approximately 175,000 square feet, over a lineal distance of 1,250 feet. The drapery system consists of cable net and wire mesh panels, which will be fastened together on the ground, and then installed using a crane. The drapery will be secured to the rock slope with three types of anchors; ground, post, and suspended. The anchors are ¾ inch diameter steel cable and will be mechanically installed and grouted to remain in place. A man lift will be used to deliver workers, supplies, material, and equipment to the top of the slope. In addition, grinding and repaving will occur on the southbound travel lane closest to the cut slope.

During construction, the southbound lanes will be closed and used as a work area, while the northbound lanes are used to convey traffic (one lane in each direction). The travel lanes will be separated from the work area with temporary railing and rock fall fencing. The unpaved turnout located at post mile R18.18 (Rt) will be used for equipment and vehicle storage during construction. Caltrans Maintenance personnel will take the excavated soil material to an appropriately approved disposal site.

The project is located in Six Rivers National Forest and the Smith River National Recreation Area. Under 49 USC 303(d), Caltrans has determined that the proposed project would result in a *de minimis* use of a 4(f) property, as it will not adversely affect the activities; features; and attributes of the 4(f) resource, the Smith River National Recreation Area.

Determination

The Department has prepared an Initial Study for this project, and following public review, has determined from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on agricultural resources, air quality, climate change, cultural resources, geology and soils, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, transportation and traffic, or utilities and service systems.

In addition, the proposed project would have no significant effect on aesthetics, biological resources, hazards and hazardous waste material, and recreational resources.

CINDY ANDERSON
Office Chief – North
North Region Environmental Services
California Department of Transportation

1-20-10
Date

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Proposed Project

Project Title

Cable Mesh Drapery System

Lead Agency Name, Address and Contact Person

State of California, Department of Transportation
P.O. Box 496073, Redding, CA 96049-6073
Edward Espinoza, (530) 225-3308

Project Location

The project is located on State Route 199 in Del Norte County, from PM R18.3 to R18.6, approximately five miles north of the community of Gasquet.

Project Sponsor's Name and Address

State of California, Department of Transportation
P.O. Box 3700, Eureka, CA 95502-3700
Kevin Church, (707) 445-6440

Purpose and Need

The purpose of this project is to increase safety and roadway reliability by reducing the amount of rock debris that reaches the travel lanes. The rock fall in this area creates uncertain roadway conditions, limits mobility, and poses risk to maintenance personnel when removing the debris.

The California Department of Transportation (Caltrans) Maintenance and the California Highway Patrol have identified this as an area with frequent rock fall during the wet season. There have been three documented collisions associated with rock fall in the previous five years.

Rock fall mitigation safety improvements are included within the blanket improvement portion of the Highway Safety Improvement Program Guidelines. A Project Study Report was signed on October 26, 2007 to program the development of this project.

Description of Project

Alternatives considered for the project include a "build" and a "no-build" alternative. The no-build alternative provides a baseline for comparing the impacts associated with the proposed build alternative.

Proposed Build Alternative

This project proposes to install a cable mesh drapery system on the cut slope face along State Route 199 from PM R18.3 to R18.6. The adjacent roadway is a four-lane divided (double yellow) conventional highway with 4-foot paved shoulders.

The problematic slope consists of fractured bedrock overlain with an eroding conglomeration of cobble, soil, boulders, and rock fragments (some over four feet in diameter). The cut slope face is approximately 95% rock with some small shrubs and trees. Trees, shrubs and small plants also exist on the top of the slope.

The area to be covered with cable mesh is approximately 175,000 square feet, over a lineal distance of 1,250 feet. The drapery consists of cable net and wire mesh panels, which will be fastened together on the ground, and then installed using a crane. The drapery will be secured to the rock slope with three types of anchors: ground, post, and suspended. The anchors are ¾ inch diameter steel cable and will be mechanically installed and grouted to remain in place. A man lift will be used to deliver workers, supplies, material, and equipment to the top of the slope. All of the work will be completed from the man lift, the crane, and by workers rappelling down the slope. Access roads will not be created for this project. Work will also include grinding and repaving the southbound lane closest to the rock slope, as falling rock has scarred and distressed the pavement.

During construction, the southbound lanes will be closed and used as a work area, while the northbound lanes are used to convey traffic (one lane in each direction). The travel lanes will be separated from the work area with temporary railing and rock fall fencing. The unpaved turnout located at post mile R18.18 (Rt) will be used for equipment and vehicle storage during construction. The project will take approximately sixty to seventy work days.

No Build Alternative

Although the no-build alternative would have no environmental impacts, it would not achieve the purpose and need of the project: to improve the safety and reliability of the highway at this location. The no-build alternative would also result in continued maintenance costs and limit mobility on this segment of highway.

Surrounding Land Uses, Setting, and Zoning

The existing State Route passes through the Six Rivers National Forest (SRNF) - Gasquet District and the Smith River National Recreation Area. The SRNF Land and Resource

Management Plan governs the use of the land in this area. Compatible uses within this USFS land management prescription are recreation, hiking, fishing, and modified timber harvest. Applicable Forest Standards and Guidelines also include the establishment of transportation and utility corridors as needed to accommodate existing and planned utilities. Caltrans currently has a Department of Transportation (DOT) easement from the STNF at this location; an additional DOT easement will not be required for this project.

Permits and Approvals Needed

The following permits, reviews, and approvals would be required for project construction:

Agency	Permit/Approval	Status
Six Rivers National Forest	Special Use Permit	After consultation, Six Rivers has determined that the project is within an existing DOT easement, is considered routine maintenance, and will not require a Special Use Permit.
Six Rivers National Forest	Concurrence with Caltrans "de minimis" use finding under Section 4(f)	Concurrence was provided by Six Rivers National Forest and can be found in Appendix B.
Six Rivers National Forest	Coordination for sensitive plant species.	The botanical information has been provided to the USFS Biologist.
United States Fish and Wildlife Service	Section 7 Consultation for Threatened and Endangered Species	The USFWS has confirmed the "no effect" determination for the Northern Spotted owl and Marbled Murrelet.
California Department of Fish and Game	Consultation for sensitive plant species.	DFG concurred with the "less than significant" impact finding for sensitive plant species.

State, Regional, and Local Plans and Programs

The following plans and programs were considered during the development of the Cable Mesh Drapery System project. These plans and programs may be referenced, in other sections of this Initial Study, as they apply to a given environmental topic.

- State Route 199 Route Concept Report (RCR), July 1999 - California Department of Transportation
- Del Norte 2007 Regional Transportation Plan, June 2007 – Del Norte Local Transportation Commission

- Del Norte County 2008 Regional Transportation Improvement Program, January 2008 – Del Norte Local Transportation Commission

- Del Norte Goods Movement Action Plan, April 2007; updated October 2007 - Del Norte Local Transportation Commission

- Six Rivers Forest Management Plan (land and resource management plan), 1995 – Six Rivers National Forest

Figure 1 - Project Vicinity Map

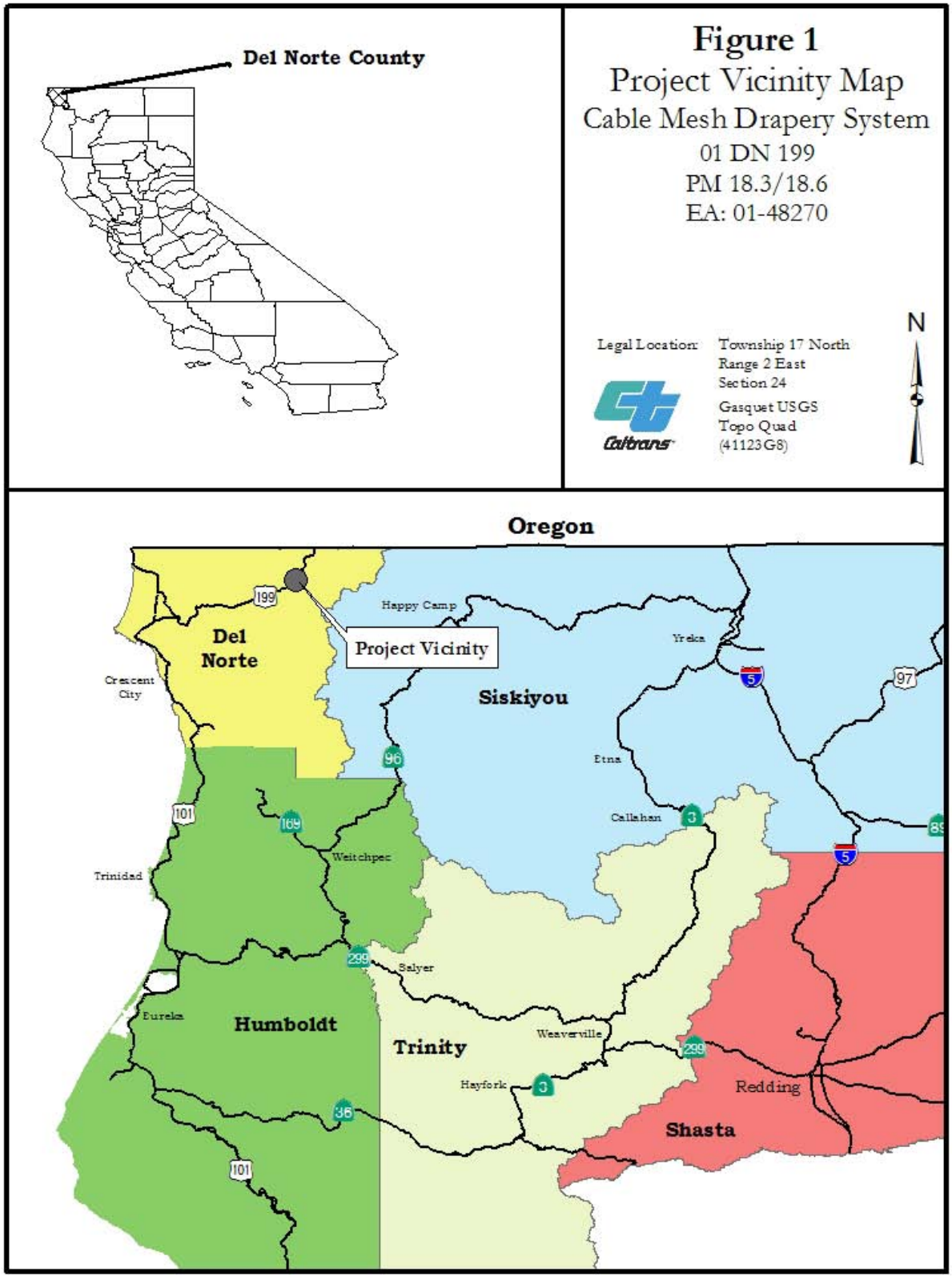
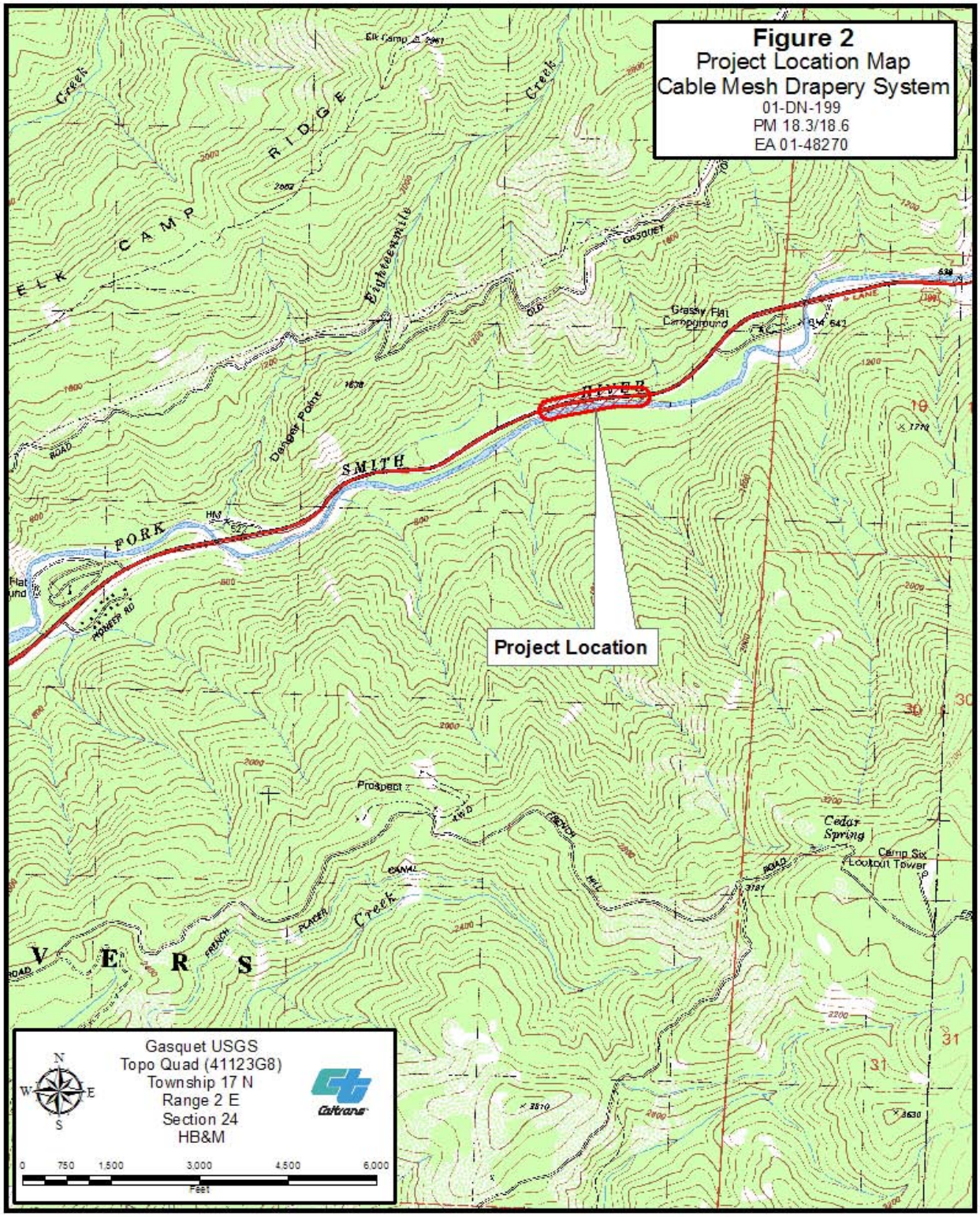


Figure 2 – Project Location Map



Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, as indicated by the information provided on the following pages.

X	Aesthetics
	Agricultural Resources
	Air Quality
X	Biological Resources
	Cultural Resources
	Geology/Soils
X	Hazards and Hazardous Materials
	Hydrology/Water Quality
	Land Use/Planning
	Mineral Resources
	Noise
	Population/Housing
	Public Services
X	Recreation
	Transportation/Traffic
	Utilities/Service Systems
	Mandatory Findings of Significance

Affected Environment, Environmental Consequences, and Mitigation Measures

This section explains the impacts that the project would have on the human, physical, and biological environments in the project area. It describes the existing environment that could be affected by the project.

Parks and Recreational Facilities

Regulatory Setting

The Smith River Recreation area is located in the northwest corner of California and is managed by the Six Rivers National Forest – Gasquet District. This National Recreation Area was created by congress in 1990 to protect the area's special scenic value. The Smith River National Recreation Area covers more than 300,000 acres and has abundant opportunity for recreation including camping, hiking, kayaking, swimming, and fishing. The recreation area has four developed campsites, sixty-five miles of wilderness/botanical trails, and access to the Middle Fork Smith River.

Affected Environment

The project is located in the Six Rivers National Forest and the Smith River National Recreation area. Two campgrounds, one botanical trail, and the Middle Fork Smith River are within a two mile radius of the project. The project sits between Panther Flat and Grassy Flat Campgrounds, and is only one-half mile from the Darlingtonia Trail. The Middle Fork Smith River runs parallel to State Route 199, and is approximately 100 feet below the highway at this location.

Environmental Consequences

The cable mesh drapery project is not anticipated to impact these recreational facilities as the scope of work is restricted to the cut slope above the highway, and the southbound lane closest to the cut slope. The proposed project will have a less than significant impact on park and recreational facilities.

Avoidance, Minimization, and/or Mitigation Measures

As the scope and design of the project has evolved, the following avoidance measures have been incorporated to ensure the recreational facilities are not impacted:

- This project does not include expansion of the existing transportation facility.

- A common method for cable mesh drapery installation is by use of a helicopter. It was determined that this could cause disruption to the park visitors, so the cable mesh will be installed by use of a crane.

- In many instances, access roads are established to construct a project. For this project, a man lift and crane will be used to deliver the equipment, workers, and supplies to the top of the slope, so an access road will not be needed.

- The highway will remain open with one lane of traffic in each direction, so project related delays to visitors will be minimized.

- The construction equipment will be confined within the closed off southbound lanes, or the designated staging area.

Section 4(f) – Parks & Recreation

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S.C 303, declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

SAFETEA-LU Section 6009(a) amends existing 4(f) legislation to allow the U.S. DOT to determine that certain uses of 4(f) land will have no adverse affect on the protected resource. De minimis impacts on publicly owned parks, recreation areas, and wildlife and waterfowl refuges are defined as those that do not adversely affect the activities, features, and attributes of the 4(f) resource.

The project has the potential to impact the following section 4(f) resources: The Smith River National Recreation Area and the Middle Fork Smith River (see Wild & Scenic Rivers).

This safety project proposes to install a cable mesh drapery system on a rocky cut slope, adjacent to an existing highway, within the current DOT easement. The work will be limited to previously disturbed areas, and will not impact the recreational use of the area. The project does not include expansion of the existing transportation facility, or work that would impact the river. Avoidance and minimization measures have been included in the project in order to protect the 4(f) property. (This document includes these measures under the individual areas of discussion, however, a comprehensive list of avoidance, minimization, and/or mitigation measures for the project can be found in Appendix C.)

It has been determined that the proposed project would result in a de minimis use of a 4(f) property (Smith River National Recreation Area). The use is de minimis, as the project will not adversely affect the activities, features, and attributes of the 4(f) resource.

Although the Department has been delegated the authority to make the de minimis use determination, concurrence is required from the responsible official with jurisdiction over the resource. The draft Initial Study was provided to Six Rivers National Forest for review.

In addition to the state agency and Six Rivers National Forest review, the public also had an opportunity to comment on the project effects to the identified 4(f) resource. For this project, the opportunity for public comment was provided during the formal public comment period for the Initial Study. A notice was published in the local newspaper to provide information regarding the public comment period. No public or agency comment was received.

After completion of the public review process for the draft Initial Study, concurrence was provided by Six Rivers National Forest. The concurrence letter can be found in Appendix B.

Wild and Scenic Rivers

Regulatory Setting

Projects affecting Wild and Scenic Rivers are subject to the National Wild and Scenic Rivers Act (16 USC 1271) and the California Wild and Scenic Rivers Act (Pub. Res. Code sec. 5093.50 et seq.).

There are three possible types of Wild and Scenic Designations:

Wild: undeveloped, with river access by trail only

Scenic: undeveloped, with occasional river access by road

Recreational: some development is allowed, with road access

Smith River

The Smith River System, sometimes called the Smiths, is comprised of the North Fork, Middle Fork, South Fork, and the Smith River. The three forks and 45 branches come together to form the Smith, which flows into the Pacific Ocean. More than three hundred miles of the Smith River System has been designated as wild and scenic.

Affected Environment

This project is adjacent to the Middle Fork Smith River, at the East Six Rivers Viaduct 1-68, and is within the Smith River National Recreation Area. This segment of river has been designated as Wild and Scenic. The river flows approximately 100 feet downhill from the highway. The following existing built elements can be seen from the Smith River: large cut slopes, metal beam guardrail, and existing retaining walls.

Environmental Consequences

This project will have no impact on the Middle Fork Smith River as the proposed work will be conducted on the cut slope above the four lane highway, opposite the river and viaduct.

Avoidance, Minimization, and/or Mitigation Measures

The cable mesh drapery system will not have an adverse affect on the free flowing characteristics of the river, nor will it alter the river segment's designation of Wild and Scenic.

- The Middle Fork Smith River is outside the area of potential environmental impact.
- Construction work is limited to the cut slope and the southbound travel lanes, across from the river.
- Temporary rail with rock fall fencing will be used to separate the construction area from the northbound travel lanes.

Section 4(f) – Wild and Scenic River

Section 4(f) can apply to portions of Wild and Scenic Rivers which are being used as a park; recreation, wildlife, or waterfowl refuge; or for historic purposes. In determining whether Section 4(f) applies to a project; 1) the project must involve a resource that is protected by the provisions of Section 4(f), and 2) that there is a "use" of that resource.

23 CFR 774.17 defines "use" in three ways:

- When land from a Section 4(f) resource is permanently incorporated into a transportation facility or project (actual use);
- When there is a temporary occupancy of Section 4(f) resource that does not meet the five criteria of temporary use; and
- When there is constructive use of the Section 4(f) resource.

Two 4(f) resources have been identified for this project; the Smith River National Recreation Area, and the Middle Fork Smith River. Although this portion of the Wild and Scenic River has been identified as a resource, 4(f) is not applicable as there is no "use" of the river. The proposed project will not use, impact, or encroach upon the Middle Fork Smith River.

Visual/Aesthetics

Regulatory Setting

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of *aesthetic*, natural, scenic and historic environmental qualities." (CA Public Resources Code Section 21001[b])

Affected Environment

The Smith River flows approximately one hundred feet below the highway and is the main focal point along the route. Views of the river and exposed rock outcroppings are common, and provide a scenic resource for the driving public. The visible built elements are limited to highway infrastructure including metal beam guardrail, highway signage, culverts, and asphalt pavement with traffic striping. From the water and shores of the Smith River, large cut slopes, metal beam guardrail, and existing retaining walls are the most common visible built elements.

The project proposes to install a cable mesh drapery system over an existing rock road cut which is brown, to light brown in color, and uneven in texture. The cable mesh will change the visual character from a rough rock surface to a more smooth surface.

Environmental Consequences

The addition of the cable mesh will create a moderate visual change with a less than significant impact. This type of cable mesh drapery system has been used on scenic highways, including other locations on State Route 199, and on State Route 1 (the Pacific Coast Highway, south of Big Sur).

Avoidance, Minimization, and/or Mitigation Measures

It has been determined that the use of a dark colored cable mesh system will minimize the level of visual intrusion when viewed by passing motorists.

- Dark brown cable mesh will be used for this project.

Biological Environment

Plant Species

Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) share regulatory responsibility for the protection of special-status plant species. "Special-status" species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are afforded varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species Section in this document for detailed information regarding these species.

This section of the document discusses all the other special-status plant species, including CDFG fully protected species and species of special concern, USFWS candidate species, and non-listed California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et seq. See also 50 CFR Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act, Public Resources Code, Sections 2100-21177.

Affected Environment

Botanical surveys and studies were conducted to determine the presence of special status plant species. The following species were observed within the biological study area:

Arabis koehleri var. stipitata (Koehler's stipitate rock cress): This species is known to occur in Del Norte, Siskiyou, and Trinity Counties. It has also been found in the State of Oregon. This plant can be found in rocky serpentine soils in areas of low growing shrubs and lower montane coniferous forests.

Gilia capitata ssp. Pacifica (Pacific Gilia): Found along the north coast in Del Norte, Humboldt, and Mendocino Counties, as well as the State of Oregon, this species prefers areas of low growing shrubs and grasslands.

Lomatium howellii (Howell's Biscuitroot): This perennial herb is native to the Klamath Mountains of southern Oregon and northern California, and is known to be found in serpentine soils.

Cardamine nuttallii var. gemmata (Nuttall's Toothwort): This plant grows in serpentine soils along the north coast ranges in Del Norte County, as well as Oregon and Washington states. It can be found in both montane and north coast coniferous forests.

Iris bracteata (Siskiyou iris): Growing in Del Norte County and the state of Oregon, this species grows in serpentine soils and can be found in broadleaved upland forests and lower montane coniferous forests.

Salix delnortensis (Del Norte willow)**:** This small tree or shrub grows in riparian forest on serpentine soils in Del Norte and Siskiyou Counties, and the state of Oregon.

Rare Natural Community

The Natural Communities Program of the California Natural Diversity Database (CNDDB) maintains records on occurrences of natural communities considered rare by the California Department of Fish and Game. A records search found that two occurrences of one natural community have been recorded in the area: Darlingtonia seep.

A Darlingtonia seep occurs in the west area of the biological study area. It meanders through a flat area dominated by Port Orford Cedar and California huckleberry. Additional canopy species include Douglas-fir and Pacific madrone. The shrub layer around the seep is dominated by Labrador tea and western azalea. The California pitcherplant (Darlingtonia californica – CNPS List 4.2) was observed throughout the seep and is very dense where found.

Darlingtonia californica (California pitcherplant): This carnivorous plant is native to northern California and Oregon, and grows in seeps or bogs with cold running water.

Environmental Consequences

Following is a summary of the plant impacts that would occur as a result of this project. This plant information was given to the California Department of Fish and Game (CDFG) and the United States Forest Service (USFS). After consultation and field review, CDFG concurs that the project will result in a less than significant impact to these special status plant species. The impact determination is based on the number of plants occurring outside the impact area, and the implementation of avoidance and minimization measures.

***Arabis koehleri var. stipitata (Koehler's stipitate rock cress*):** A total of 489 plants were identified in the biological study area (BSA). The total number of plants that may be impacted by the cable mesh or anchor locations is approximately 12.

Gilia capitata ssp. Pacifica (Pacific Gilia): Approximately 315 of these plants were found in the BSA. The total number of plants that may be impacted is approximately 38.

Lomatium howellii (Howell's Biscuitroot): The total number of plants found within the BSA is 30. Two of these plants may be impacted by anchors, and no plants will be impacted by the cable mesh as habitat does not exist on the cut slope.

Cardamine nuttallii var. gemmata (Nuttall's Toothwort): More than 500 plants were found within the BSA. Approximately 15 of these plants will be impacted by the anchors, and no plants will be impacted by the cable mesh as habitat does not exist on the cut slope.

Iris bracteata (Siskiyou iris): Approximately 500 of these plants were encountered in the BSA, with less than 20 being impacted by the anchors. No plants will be impacted by the cable mesh as habitat does not exist on the cut slope.

Salix delnortensis (Del Norte willow): Up to five different plants were found throughout the BSA in wet areas around the inboard ditch and the Darlingtonia fen. No plants will be impacted by the cable mesh as habitat does not occur on the cut slope.

Rare Natural Community

The Darlingtonia seep occurs in the west area of the BSA, however, it is outside of the project impact area. The seep will not be impacted by the cable mesh or the anchors.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures that have been incorporated into the project design and schedule:

- Adjust anchor locations as much as possible to avoid impacts to plants (Koehler's stipitate rock cress)
- Protect or identify individual plants near work areas with wire cages or pin flags (Koehler's stipitate rock cress, Howell's biscuitroot, Nuttall's toothwort, Siskiyou iris)
- Remove excavated soil from the anchor locations so it will not cover plants (Koehler's stipitate rock cress, Nuttall's toothwort, Siskiyou iris)

- Collect and redistribute seed from impacted plants (Koehler's stipitate rock cress)
- Work on cut slope only after plants have gone to seed (establish work windows)
- Limit construction access in specific locations (Del Norte willow)
- Educate construction personnel on plant identification (Koehler's stipitate rock cress)
- Limit construction access so construction personnel do not enter the area of the seep (California pitcherplant, Del Norte willow)

Plant Pathogens

Regulatory Setting

Plant pathology is the scientific study of plant diseases caused by pathogens (infectious diseases) and environmental conditions. In addition to natural and man made physiological plant disorders, organisms that cause infectious disease include fungi, oomycetes, bacteria, viruses, viroids, virus-like organisms, phytoplasmas, protozoa, nematodes and parasitic plants.

Affected Environment

Port Orford Cedar (POC) is known to grow within the project vicinity and was identified within the BSA. This species was observed growing along the top of the rock cut slope.

Chamaecyparis lawsoniana (Port Orford Cedar): This is a large evergreen coniferous tree native to southwest Oregon and northwest California. This tree can grow from sea level to 4,900 feet in altitude, regularly reaches heights of 200 feet, and is often found in mountain valleys and along streams.

The most serious disease of POC is a root disease caused by the soil fungus Phytophthora lateralis. Nursery stock, ornamentals, and timber trees are subject to infection. This fungus infects succulent feeding roots and spreads in the inner bark to quickly kill the tree. The largest infected trees die within 2 to 4 years, the smallest within a few weeks. The rate of disease development and appearance of infected trees may differ with environment, but death is always certain. The chance that a tree will be infected depends on the probability of it being exposed to the fungus. Remote trees on high ground may escape infection indefinitely.

Existing information indicates that major spread of Phytophthora lateralis occurs through earth movement in construction, in road maintenance and use, and in logging operations. In addition to soil disruption, surface water is also important in moving the fungus.

Although it is not completely understood, Phytophthora lateralis is also spread within and between root systems, counter to the directional flow of soil water.

Environmental Consequences

The POC within the biological study area were surveyed for signs of Phytophthrora lateralis infection. The POC located in the gravel turnout, across the highway from the cut slope, showed visual signs of infection. Through the implementation of best management practices (BMPs) during construction, and ongoing coordination with the USFS the project is anticipated to have a less than significant impact on this species.

Avoidance, Minimization, and/or Mitigation Measures

To avoid the spread of POC root rot (Phytophthora lateralis); Caltrans will continue to coordinate with the USFS and include BMPs in the project specifications. These BMPs may include:

- Restricting the movement of humans and equipment, by limiting access in the POC areas
- Minimizing the transportation of soil on equipment and shoes
- Directing water runoff away from POC area

Threatened And Endangered Species

Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC), Section 1531, et seq. See also 50 CFR Part 402. This act and subsequent amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration, are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NOAA Fisheries) to ensure that they are not undertaking, funding, permitting or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 is a Biological Opinion or an incidental take permit. Section 3 of FESA defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct.”

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project caused losses of listed species populations and their essential habitats. The California Department of Fish and Game (CDFG) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFG. For projects requiring a Biological Opinion under Section 7 of the FESA, CDFG may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

Affected Environment

A list of threatened and endangered species was obtained from the USFWS and indicates that the following bird species may be present within the Gasquet quadrangle where the project is located; northern spotted owl and marbled murrelet.

The USFWS list also indicates the following threatened or endangered plant is known to occur in the area of the project: Arabis macdonaldiana (McDonald's rock cress).

Northern Spotted Owl: The northern spotted owl is a brown medium sized owl located in Western North America. This owl primarily inhabits old growth forests and nests in cavities or platforms in large trees. The greatest threats to the northern spotted owl are; loss of old growth and mature forest, which contain trees for nesting and prey habitat; and the establishment of barred owls, an aggressive species similar to the spotted owl, which prefers similar habitat and resources and was previously geographically isolated from the spotted owl. The northern spotted owl was listed by the USFWS on June 26, 1990. In 1992, critical habitat was designated on federal lands in California, Oregon, and Washington.

Marbled Murrelet: The marbled murrelet is a small seabird from the North Pacific. It nests in old grown forests, or on the ground at higher latitudes where trees cannot grow. The marbled murrelet is considered globally threatened and the biggest threat to this species was long considered the loss of nesting habitat (old growth forests). Additional threats such as predation due to human disturbances and climate change are now considered important. The marbled murrelet was listed as threatened by the USFWS in

1992. In 1996, critical habitat was designated on federal lands in California, Oregon, and Washington.

Arabis macdonaldiana (McDonald's rock cress): This perennial herb occurs in the state of Oregon, as well as Mendocino, Siskiyou, Trinity, and Del Norte Counties. The plant is known to be found on barren to shrub-covered shallow dry ridges, and rocky outcroppings. McDonald's rock cress blooms May through June, and is listed as Federally Endangered; California State Endangered; and California Native Plant Society rare, threatened, or endangered.

Environmental Consequences

Field studies were conducted to determine the presence of the northern spotted owl and the marbled murrelet. The Caltrans biologist conducted surveys for nests, nesting habitat, and indications of feeding. The field studies did not indicate the presence of the northern spotted owl or the marbled murrelet. Consultation with the USFWS indicated that there are no known nesting locations within two-miles of the project. Based on the project description, location, and current highway noise levels, the USFWS biologist determined there would be no effect to either of these species.

Botanical surveys were conducted to determine the presence of McDonald's rock cress within the biological study area. This plant species was not found within the biological study area for the project.

It has been determined that the project would have no impact on threatened or endangered species.

Avoidance, Minimization, and/or Mitigation Measures

There are no threatened and endangered species within the project vicinity; therefore, project work windows and noise restrictions are not required for these species. However, to avoid potential impacts to these species the following shall apply:

- Limit construction work and personnel to the identified project area and staging areas.

Hazardous Waste Materials

Regulatory Setting

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The purpose of CERCLA, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for "cradle to grave" regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

Aerial Deposited Lead: Aerially deposited lead (ADL) is lead that has been deposited due to emissions from vehicles powered by leaded gasoline and is found next to virtually all roadways. Lead is a solid inorganic metal found at varying concentrations in the natural environment, but is found at significantly higher levels along roadways due to emissions. Lead was added to gasoline until the mid-1980s to improve the performance of gasoline powered engines. Soil that contains lead above established hazardous waste thresholds and is left in-place would not be necessarily classified by the Department of Toxic Substances Control (DTSC) as a waste. The DTSC has provided site-specific determinations that

"movement of wastes within an area of contamination does not constitute "land disposal" and, thus, does not trigger hazardous waste disposal requirements." Therefore, lead-impacted soil that is scarified in-place, moisture-conditioned and re-compacted during roadway improvement activities might not be considered a waste, and not require removal.

Naturally Occurring Asbestos: Asbestos is the name for several types of naturally occurring fibrous minerals that are a human health hazard when inhaled or ingested. Asbestos that is found in the natural environment, as opposed to asbestos that has been mined and processed for industrial use, is called Naturally Occurring Asbestos (NOA). The California Air Resources Board (CARB) regulates NOA through two Air Toxic Control Measures (ATCMs); ATCM 93105 "*Asbestos Airborne Toxic Control Measure For Construction, Grading, Quarrying, And Surface Mining Operations*" and ATCM 93106 **"***Asbestos Airborne Toxic Control Measure For Surfacing Applications*." NOA has the potential to pose a health hazard when it becomes an airborne particulate. Roadway improvement activities may disturb NOA-containing rock and soil, thereby potentially creating an asbestos hazard. Mitigation practices can reduce the risk of exposure to asbestos-containing dust. The primary mitigation practice used for controlling exposure to potentially asbestos-containing dust is the implementation of engineering controls including wetting the materials being disturbed. Asbestos dust control methods have been defined in the ATCMs for airborne asbestos encountered during construction and road surfacing applications. Use of material containing more than 0.25% asbestos as a surfacing substance is not permitted. Onsite reuse or disposal of NOA-containing materials is allowed by the regulations if it is buried under at least 4 inches of material that does not have asbestos.

Affected Environment

Preliminary Site Investigation: A preliminary site investigation (PSI) was performed at the project site to determine if hazardous materials were present and, if so, in what concentrations. The PSI consisted of collecting soil and rock samples from the roadside and cut slope. The samples were then analyzed for ADL and NOA by California licensed and certified laboratories.

ADL: The reported lead levels in the samples collected on the project site are consistent with naturally occurring background lead levels found on other project sites in the region. Because the reported lead concentrations are well below hazardous waste levels, soil materials excavated within the proposed project area do not require any special handling procedures, and may be reused onsite or disposed of without restriction.

NOA: Four targeted rock chip samples and two soil samples were collected and analyzed for asbestos. The soil samples were found to contain between 8.25 and 12.0 percent chrysotile asbestos. Two of the targeted rock chip samples were found to contain less than 12.5 percent chrysotile asbestos, while the other two contained 60 and 70 percent chrysotile asbestos. The rock chip and soil samples contained chrysotile asbestos above the CARB regulatory limit of 0.25%.

Environmental Consequences

ADL: Based on the results of the on-site testing of the material, there are no potential impacts identified with ADL.

NOA: Though asbestos was reported to be present at or above regulated levels in the targeted samples collected from the project site, the asbestos content does not render these materials unsuitable for reuse or disposal within the Caltrans Right of Way. However, construction or maintenance activities involving these asbestos-containing materials does fall under regulatory jurisdiction of the California Division of the occupational Safety and Health Administration (Cal-OSHA) under CCR Title 8 Section 5208 and the Air Resources Board's Asbestos Airborne Toxic Control Measures ATCMs. Special handling procedures should be utilized during construction and maintenance activities to minimize releases of NOA to air.

Avoidance, Minimization, and/or Mitigation Measures

ADL: Since there are no potential impacts identified with this material, there are no avoidance, minimization, and/or mitigation measures identified or required for this project. However, per Caltrans requirements when lead is detected in soil samples, the contractor will prepare a project specific Lead Compliance Plan to minimize worker exposure to potentially lead-impacted soil.

NOA: Because NOA was found within the project site at a high level, appropriate procedures will be required, per ATCM 93105 and ATCM 93106, to minimize releases of NOA to air (dust control) and surface waters (storm water discharge). These measures will be determined by a hazardous waste specialist and may include; preparation and implementation of a dust compliance plan; locating a water truck or water tank on the job site during work; application of water to the area prior to ground disturbance, including grading or excavation, to prevent visible dust emissions; restriction of construction vehicle speed to 15 miles per hour or less on the job site; wet and cover excavated loads prior to transporting material containing NOA; capping material containing NOA with six to twelve inches of non-asbestos material; and disposing of the material at an appropriately permitted disposal site.

Due to the presence of Asbestos on the project site, the contractor will be required to hire a Certified Industrial Hygienist (CIH) to prepare an Asbestos Compliance Plan to minimize the exposure of lead to the public, construction workers, State inspectors. The CIH may require air monitoring or exposure assessments for worker safety.

Cumulative Impacts

Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive types of agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

CEQA Guidelines, Section 15130, describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts, under CEQA, can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts, under NEPA, can be found in 40 CFR, Section 1508.7 of the CEQ Regulations.

Affected Environment

Proposed Project: This project proposes to install a cable mesh drapery system on an existing cut slope located at PM R18.3/R18.6, on State Route (SR) 199 in Del Norte County. Resources that may be potentially affected are visual, biological, parks and recreation, and hazardous waste.

Foreseeable Actions: The California Department of Transportation is currently preparing a Draft Environmental Impact Report (DEIR) for highway improvements on SR 197 and SR 199, in Del Norte County. The "197/199 Safe STAA Access Project" includes five

projects in seven spot locations. The five projects will allow routes 197 and 199 to be reclassified as STAA network truck routes. These projects will provide safety enhancing improvements including lane widening, shoulder widening, curve realignment, and sight distance improvement.

Environmental Consequences

Proposed Project: Studies have been conducted to assess the level of potential impact this project will have on the human, physical, and biological environment. Following are the resources that will potentially be impacted by the project, the overall health of those resources, and the identified level of impact that will result from the project.

Park and Recreation Facilities: The project is located in the Smith River National Recreation Area. This recreational resource is in good health and is not at risk. The project constitutes a de minimis use of a 4(f) property, as it will not adversely affect the activities, features, and attributes of the resource. The project will have a less than significant impact on the park and recreation resources.

Biological: Studies were conducted within the biological study area and project vicinity for sensitive, rare, threatened, and endangered species. This project will have minimal impact on sensitive plant species, and no impact on threatened and endangered species. The health of the biological resource is good as the populations of these plant species are abundant outside the impact area. The project will have less than significant impact on biological resources.

Visual: The visual impact analysis concludes that the project will create a moderate visual change, as the rough rock slope will have a more smooth surface after the installation of the cable mesh. The visual resource will not be greatly changed as existing built elements can currently be seen from the roadway and the banks of the Middle Fork Smith River. The project will have a less than significant impact on visual resources.

Hazardous Waste: Studies indicated the presence of Aerially Deposited Lead (ADL) and Naturally Occurring Asbestos (NOA) within the project area. The levels of ADL were well below hazardous waste levels and the soil materials do not require special handling due to lead content. NOA is common in serpentine soils, and appropriate procedures will be required to minimize the releases of NOA to the air. The project will have a less than significant impact to the environment.

Foreseeable Actions: The environmental studies are currently being finalized for the "197/199 Safe STAA Access Project" and the resulting impact analysis is not yet available.

Avoidance, Minimization, and/or Mitigation Measures

The proposed project has minor impacts on the identified resources; they have been found to be less than significant, and do not require mitigation. The resources are in good health, and they are not at risk for decline as a result of this project. Cumulatively, the proposed project has an incremental effect that is not collectively considerable.

The environmental document for the "197/199 Safe STAA Access Project" will also include a cumulative impacts analysis. That analysis will determine the incremental effect of those projects. If the incremental effect is found to be cumulatively considerable, appropriate avoidance, minimization, and mitigation measures will be incorporated.

Climate Change

Regulatory Setting

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to human activity that include carbon dioxide (CO_2), methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. Assembly Bill 1493 requires the California Air Resources Board (CARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year; however, in order to enact the standards California needed a waiver from the U.S. Environmental Protection Agency (EPA). The waiver was denied by EPA in December 2007. See California v. Environmental Protection Agency, 9th Cir. Jul. 25, 2008, No. 08-70011. However, on January 26, 2009, it was announced that EPA will reconsider their decision regarding the denial of California's waiver. On May 18, 2009, President Obama announced the enactment of a 35.5 mpg fuel economy standard for automobiles and light duty trucks which will take effect in 2012. This standard is the same standard that was proposed by California, and so the California waiver request has been shelved.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. California, in conjunction with several environmental organizations and several other states, sued to force the U.S. Environmental Protection Agency (EPA) to regulate GHG as a pollutant under the Clean Air Act (Massachusetts vs. Environmental Protection Agency et al., 549 U.S. 497 (2007). The court ruled that GHG does fit within the Clean Air Act's definition of a pollutant, and that the EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions.

On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

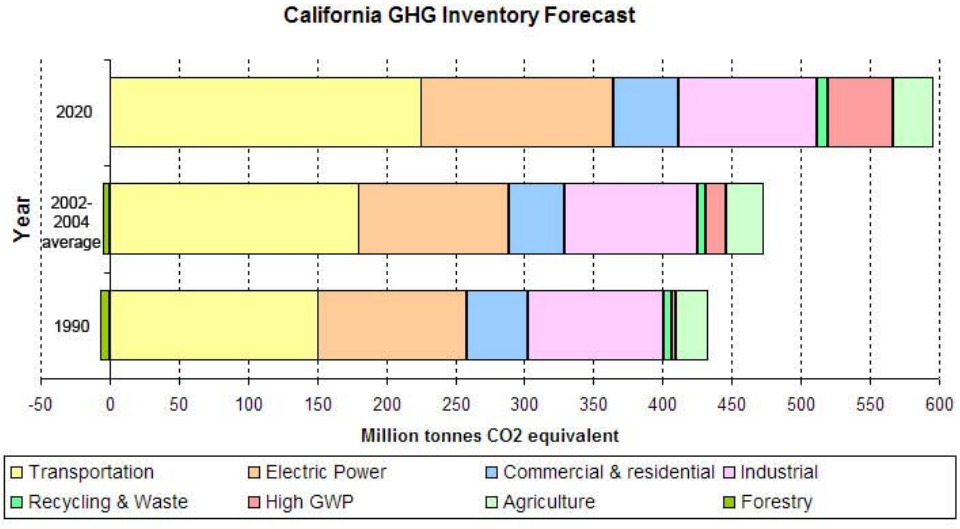
- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)--in the atmosphere threaten the public health and welfare of current and future generations.

- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA's proposed greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation's National Highway Safety Administration on September 15, 2009. [1]

According to Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate change in CEQA Documents (March 5, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." See CEQA Guidelines sections 15064(i)(1) and 15130. To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult if not impossible task.

As part of its supporting documentation for the Draft Scoping Plan, CARB recently released an updated version of the GHG inventory for California (June 26, 2008). Shown below is a graph from that update that shows the total GHG emissions for California for 1990, 2002-2004 average, and 2020 projected if no action is taken.



[1] http://www.epa.gov/climatechange/endangerment.html

California greenhouse gas inventory figure taken from:
http://www.arb.ca.gov/cc/inventory/data/forecast.htm

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation (see Climate Action Program at Caltrans (December 2006), Caltrans has created and is implementing the Climate Action Program at Caltrans that was published in December 2006. This document can be found at: http://www.dot.ca.gov/docs/ClimateReport.pdf

Project Analysis

This project proposes to install a cable mesh drapery system on the face of an existing cut slope to reduce the amount of rock debris that reaches the travel lanes. This is an off-highway project with low potential, to no potential, for climate change impacts. As discussed below construction emissions will be unavoidable, but these temporary emissions are likely to be offset by the long-term GHG benefits of improved highway operation and reduced vehicle delay.

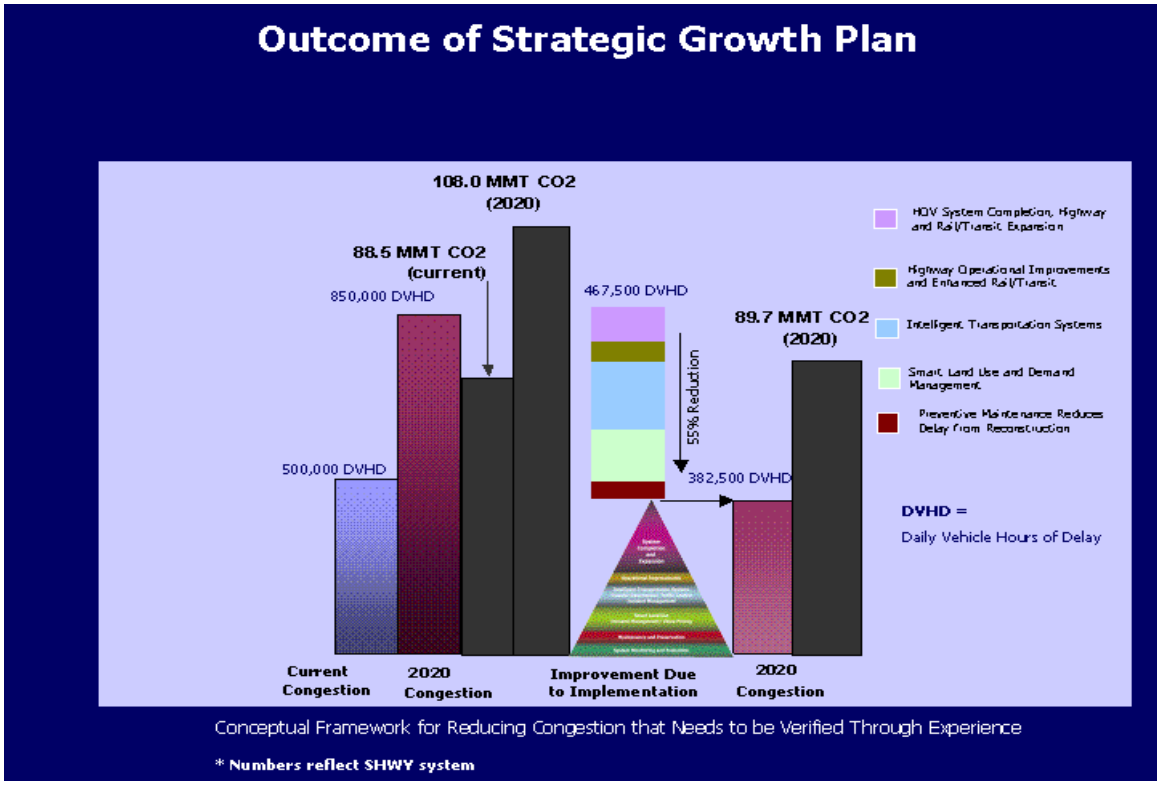
Construction Emissions

GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events.

AB 32 Compliance

Caltrans continues to be actively involved on the Governor's Climate Action Team as CARB works to implement the Governor's Executive Orders and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year. Governor Arnold Schwarzenegger's Strategic Growth Plan calls for a $238.6 billion infrastructure improvement program to fortify the state's transportation system, education, housing, and

waterways, including $100.7 billion in transportation funding through 2016.[2] As shown on the figure below, the Strategic Growth Plan targets a significant decrease in traffic congestion below today's level and a corresponding reduction in GHG emissions. The Strategic Growth Plan proposes to do this while accommodating growth in population and the economy. A suite of investment options has been created that combined together yield the promised reduction in congestion. The Strategic Growth Plan relies on a complete systems approach of a variety of strategies: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements.



As part of the Climate Action Program at Caltrans (December 2006, http://www.dot.ca.gov/docs/ClimateReport.pdf), Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority. Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; Caltrans is doing

[2] Governor's Strategic Growth Plan, Fig. 1 (http://gov.ca.gov/pdf/gov/CSGP.pdf)

this by supporting on-going research efforts at universities, by supporting legislative efforts to increase fuel economy, and by its participation on the Climate Action Team. It is important to note, however, that the control of the fuel economy standards is held by EPA and CARB. Lastly, the use of alternative fuels is also being considered; the Department is participating in funding for alternative fuel research at the UC Davis.

The following table summarizes the Department and statewide efforts that Caltrans is implementing in order to reduce GHG emissions. For more detailed information about each strategy, please see Climate Action Program at Caltrans (December 2006); it is available at http://www.dot.ca.gov/docs/ClimateReport.pdf

Table 1 Climate Change Strategies

Strategy	Program	Partnership		Method/Process	Estimated CO_2 Savings (MMT)	
		Lead	Agency		2010	2020
Smart Land Use	Intergovernmental Review (IGR)	Caltrans	Local Governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	0.975	7.8
Operational Improvements & Intelligent Trans. System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	.007	2.17
Mainstream Energy & GHG into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, CalEPA, CARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	0.0045	0.0065 0.45 .0225

Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team	Energy Conservation Opportunities	0.117	.34
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries	2.5 % limestone cement mix 25% fly ash cement mix > 50% fly ash/slag mix	1.2 .36	3.6
Goods Movement	Office of Goods Movement	Cal EPA, CARB, BT&H, MPOs	Goods Movement Action Plan	Not Estimated	Not Estimated
Total				2.72	18.67

Other Environmental Considerations

As part of the scoping and environmental analysis conducted for the project, the following environmental issues were considered but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this document.

Growth: This project does not have potential to induce growth.

Farmland/Timberland: This project will not convert Williamson Act contract land to non-agricultural uses.

Community Impacts: The project will not create a physical change that will result in a social or economic change.

Utilities: There are no utility systems that could be affected by the project.

Cultural Resources: This project has been determined to have no potential to affect historic properties, and no archaeological resources were identified within the area of potential effect (APE). Cultural Resources Screening Memo, August 2009.

Hydrology and Floodplain: The project is not a longitudinal encroachment of the base floodplain, and does not constitute a significant floodplain encroachment. Floodplain Evaluation Report Summary, June 2008.

Water Quality and Storm Water Runoff: This project will not alter the existing drainage patterns or result in an increase in storm water runoff; therefore, no modifications are required to the existing conveyance facilities. Drainage Report Exemption memo, May 2008. Water Quality Assessment Exemption, December 2009.

Air Quality: The project will not alter conformity with the Clean Air Act requirements at either the regional or project level.

Noise: This project will not result in an increase in traffic noise.

Wetlands and Other Waters: There are no "waters of the U.S." or waters of the State within the project area.

List of Preparers

This Initial Study was prepared by the California Department of Transportation, North Region Office of Environmental Management, with input from the following staff:

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Appendix A CEQA Checklist

The following checklist identifies the physical, biological, social, and economic factors that might be affected by the proposed project. The CEQA impact levels include potentially significant impact, less than significant impact with mitigation, less than significant impact, and no impact. Please refer to the following for detailed CEQA discussions regarding impacts:

- Guidance: Title 14, Chapter 3, California Code of Regulations, Sections 15000 et seq. (http://www.ceres.ca.gov/topic/env_law/ceqa/guidelines/);
- Statutes: Division 13, California Public Resources Code, Sections 21000-21178.1 (http://www.ceres.ca.gov./topic/env_law/ceqa/stat/)

Supporting documentation of all CEQA checklist determination is provided in the "Affected Environment, Environmental Consequences, and Mitigation Measures" section of this Initial Study. Documentation of "No Impact" determinations is provided under the "Other Environmental Considerations" heading.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒
	☐	☐	☐	☒
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
VII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒
VIII. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow	☐	☐	☐	☒
IX. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b)Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
X. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
XI. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
XII. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIII. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☒
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
XIV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐
XV. TRANSPORTATION/TRAFFIC: Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	☒
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Result in inadequate parking capacity?	☐	☐	☐	☒
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒
XVI. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒

	Potentially significant impact	Less than significant impact with mitigation	Less than significant impact	No impact
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒
XVII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Appendix B 4(F) De Minimis Use Concurrence

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL MANAGEMENT OFFICE
1657 RIVERSIDE DRIVE, P. O. BOX 496073
REDDING, CA 96049-6073
PHONE (530) 225-3308
FAX (530) 225-3019

Flex your power!
Be energy efficient!

December 21, 2009

01-DN-199-PM-18.3/18.6
B.A. 48270
Cable Mesh Drapery System

Six Rivers National Forest
1330 Bayshore Way
Eureka CA 95501-3834

The Department of Transportation (Caltrans) is proposing to install a cable mesh drapery system on State Route 199 in Del Norte County, five miles north of the community of Gasquet. The project area is within the Six Rivers National Forest, and the Smith River National Recreation area. The cable mesh drapery system is proposed to be installed on a cut slope to reduce the amount of rock debris that reaches the travel lanes.

Caltrans has studied the effects of this project. The studies show the proposed project will not significantly affect the quality of the environment. Under 49 USC 303(d), Caltrans has preliminarily determined that the proposed project would result in a *de minimis* impact to the Smith River National Recreation Area for purposes of 4(f) of the U.S. Department of Transportation Act of 1966.

A Proposed Negative Declaration and Initial Study were prepared for this project and made available for public review. In compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), a public notice was published for the environmental documents and the preliminary *de minimis* impact finding. The agency review period commenced on November 2, 2009 and ended on December 2, 2009. The public review period commenced on November 15, 2009 and ended on December 15, 2009. No public or agency comment was received.

Caltrans is seeking concurrence on the *de minimis* impact finding for this project. After you have reviewed the project information, please provide your signature below and return this letter. If you have any questions regarding the project please contact me at (530) 225-3308.

Thank you for your cooperation in this matter.

Sincerely,

EDWARD J. ESPINOZA
Branch Chief, Environmental Management R-1

Concurrence:

Jan 13, 2010

TYRONE KELLEY, Forest Supervisor
SIX RIVERS NATIONAL FOREST

Date

"Caltrans improves mobility across California"

Appendix C Avoidance, Minimization, and/or Mitigation Summary

Environmental Factor	Potential Impact	Avoidance/Minimization Measure	Mitigation Measure
Parks and Recreation	Impact recreational users and facilities; Use of a 4(f) property	Use a crane and man-lift for construction, no helicopter; access the cut slope from the existing highway, no new access roads; maintain one lane of traffic in each direction, no traffic delays; confine construction equipment to the closed off southbound lanes and designated staging area	n/a
Wild and Scenic River	Alter the River's Wild and Scenic designation	Exclude the river from the area of potential effect; limit construction work to the cut slope	n/a
Visual/Aesthetics	Change in visual character	Use dark colored cable mesh	n/a
Biological Resources	Impact sensitive, rare, threatened, or endangered species	Adjust anchor locations to avoid plants; protect/identify plants with wire cages or pin flags; remove excavated soil; collect and redistribute seed; work on cut slope after plants have gone to seed; limit construction access in specific locations; educate construction personnel on plant identification; limit construction work and personnel to the identified project and staging areas	n/a
Hazardous Waste	Release naturally occurring asbestos to the air	Prepare a dust compliance plan; locate a water tank on the project site; apply water prior to ground disturbance; cap material with six to twelve inches of non-asbestos material; wet and cover excavated loads prior to transporting; take material to an appropriately permitted disposal site	n/a

Appendix D Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
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FAX (916) 654-6608
TTY (916) 653-4086

Flex your power!
Be energy efficient!

August 25, 2009

TITLE VI
POLICY STATEMENT

The California State Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

Randell H. Iwasaki

RANDELL H. IWASAKI
Director

"Caltrans improves mobility across California"

Appendix E Project Plan Sheets

NOTE: FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

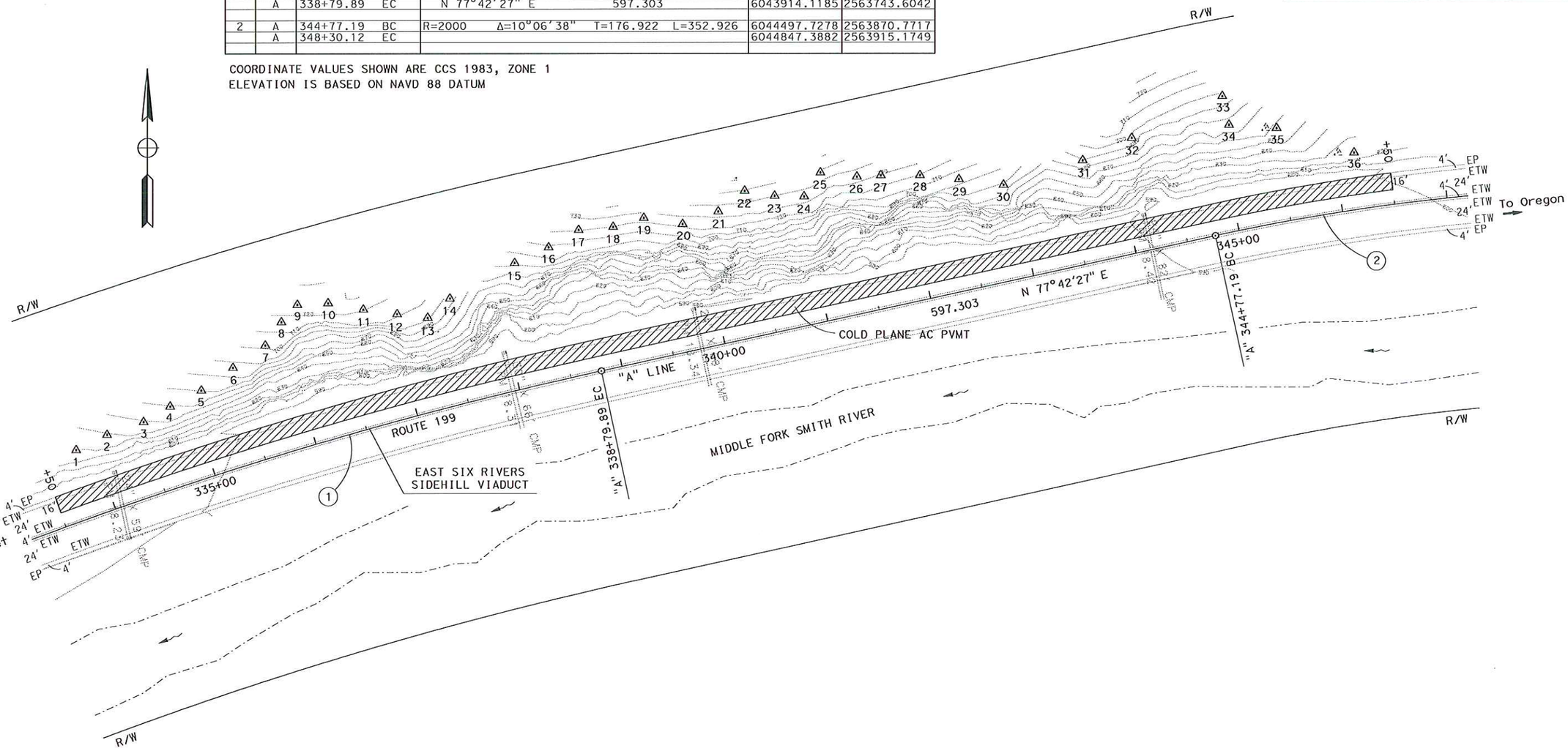
LEGEND

= COLD PLANE AC PVMT

= ANCHOR LOCATION/NUMBER

#	LINE	STATION	CURVE OR TANGENT DATA	COORDINATES NORTH	COORDINATES EAST
1	A	322+01.56 BC	R=4000 Δ=24°02'25" T=851.698 L=1678.326	6042395.8334	2563057.6688
	A	338+79.89 EC	N 77°42'27" E 597.303	6043914.1185	2563743.6042
2	A	344+77.19 BC	R=2000 Δ=10°06'38" T=176.922 L=352.926	6044497.7278	2563870.7717
	A	348+30.12 EC		6044847.3882	2563915.1749

COORDINATE VALUES SHOWN ARE CCS 1983, ZONE 1
ELEVATION IS BASED ON NAVD 88 DATUM



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	199	R18.2/R18.6		

REGISTERED CIVIL ENGINEER — 00-00-00 DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REVISED BY | DATE REVISED
Jamie Lusk
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: Dennis P. McBride
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DESIGN

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LAYOUT

SCALE: 1"=50' L-1

LAST REVISION 00-00-00 | DATE PLOTTED => 06-AUG-2009 | TIME PLOTTED => 07:04

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => t1rex
DGN FILE => 148270ea001.dgn

CU 03 231

EA 490301

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	DN	199	R18.2/R18.6		

REGISTERED CIVIL ENGINEER — 00-00-00 DATE

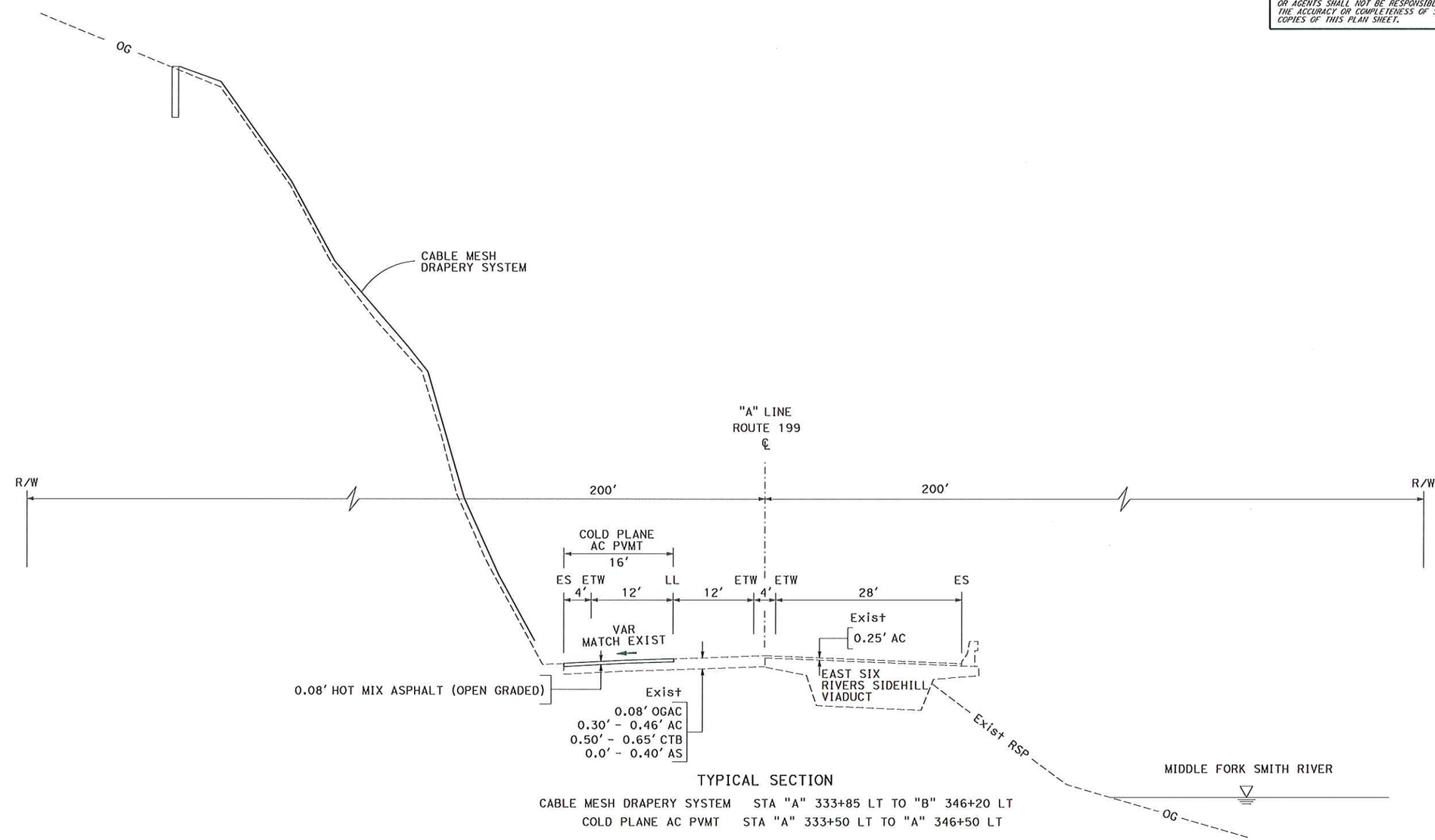
REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE SHEETS.



TYPICAL SECTION

CABLE MESH DRAPERY SYSTEM STA "A" 333+85 LT TO "B" 346+20 LT
COLD PLANE AC PVMT STA "A" 333+50 LT TO "A" 346+50 LT

TYPICAL CROSS SECTIONS

NO SCALE

X-1

REVISED BY	DATE REVISED
Jamie Lusk	

CALCULATED-DESIGNED BY

CHECKED BY

FUNCTIONAL SUPERVISOR: Dennis P. McBride

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DESIGN

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LAST REVISION 00-00-00 | DATE PLOTTED => 06-AUG-2009 | TIME PLOTTED => 07:04

BORDER LAST REVISED 4/11/2008

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

USERNAME => tirex
DGN FILE => 148270ca001.dgn

CU 03 231

EA 490301